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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,968	10/19/2000	Carlos V. Pinera	6169-137	6538

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EXAMINER

KISS, ERIC B

ART UNIT PAPER NUMBER

2192

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/691,968

Applicant(s)

PINERA ET AL.

Examiner

Eric B. Kiss

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-33 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

1. The reply filed 12 January 2005 has been received and entered. Claims 1-33 are pending.

Response to Amendment

2. Applicant's declaration filed 3 March 2004 has been received and entered. The objection to the declaration is withdrawn.
3. Applicant's amendments to the specification and drawings appropriately address the objections to the drawings. Accordingly, these objections are withdrawn in view of Applicant's amendments.
4. Applicant's amendments to the specification appropriately address the objections to the specification. Accordingly, these objections are withdrawn in view of Applicant's amendments.
5. Applicant's amendments to the claims appropriately address the objections to the specification. Accordingly, these objections are withdrawn in view of Applicant's amendments.
6. Applicant's amendments to claims 1, 7, 10, and 21 appropriately address the objections to these claims. Accordingly, these objections are withdrawn in view of Applicant's amendments.

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7. Applicant's amendments to claims 7, 12, and 21 appropriately address the rejection of these claims under 35 U.S.C. §112, second paragraph. Accordingly, this rejection is withdrawn in view of Applicant's amendments.

Response to Arguments

8. Applicant's arguments filed 3 March 2004 have been fully considered but they are not persuasive.

In response to Applicant's arguments on p. 14, in the last paragraph, continuing through the second paragraph on p. 15, *Ma et al.* discloses interactions with specific clients in updating client objects (see, for example, col. 11, lines 25-40). Thus, the updates are performed in a client-specific manner.

In response to Applicant's arguments on p. 15, in the third paragraph, *Ma et al.* discloses that a client object referencing an invalid object can read the invalid bit from the cache and decide to release the invalid object and load the update object (see, for example, col. 9, lines 24-27). Thus, the instances of the components can be terminated before they self-terminate.

In response to Applicant's arguments on p. 15, in the fourth paragraph, *Ma et al.* discloses that new instances of objects are created from the object description fetched from the meta-server's database (see, for example, col. 6, lines 4-6). Thus, at bootstrap (when new object

instances need to be created), the configuration server is queried to determine the application components (object descriptions).

In response to Applicant's arguments on p. 16, in the third paragraph, *Ma et al.* discloses interactions with specific clients in updating client objects (see, for example, col. 11, lines 25-40). Thus, the updates are performed in a client-specific manner.

In response to Applicant's arguments on p. 16, in the fourth paragraph, *Ma et al.* discloses that a client object referencing an invalid object can read the invalid bit from the cache and decide to release the invalid object and load the update object (see, for example, col. 9, lines 24-27). Thus, the instances of the components can be terminated before they self-terminate.

In response to Applicant's arguments on p. 16, in the last paragraph, continuing onto p. 17, that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., background operating system processes, which are executed before applications are initialized) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Specification

9. The amendment filed 12 January 2005 (incorporating changes originally filed 3 March 2004) is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure.

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35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the newly recited limitations in claim 12 (see the rejection of claim 12 under 35 U.S.C. §112, first paragraph that follows).

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner cannot readily find support for the newly recited limitations in claim 12, namely the active application components being processes executing in a background of the platform. Applicant is invited to clarify which portion of the originally filed specification provides such support (upon such a satisfactory showing, this rejection and the corresponding objection to the specification will be promptly withdrawn).

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-6, 10-20, and 24-33 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,920,725 to Ma et al.

As per claim 1, *Ma et al.* disclose establishing a first communications connection between a platform managing active application components and a configuration client disposed in a client position (client app 74 and object adapter 80; see, for example, Fig. 5; col. 8, lines 10-34; and col. 9, lines 6-43); establishing a second communications connection between said configuration client and a configuration server (object adapter 80 and meta server 70; see, for example, Fig. 5; and col. 11, lines 1-24); delivering client position specific updates to said configuration client over said second communications connection, wherein each update corresponds to at least one particular application component (client classes are updated; see, for example, Figs. 5 and 8; col. 9, lines 6-43; and col. 11, lines 25-40); notifying said platform that updates are available (see, for example, col. 9, lines 6-43); responsive to said notification, terminating execution of said particular active application components, delivering each said update over said first communications connection to said platform, applying each said update to

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said at least one corresponding application component, and re-executing each said update application component (see, for example, col. 9, lines 6-43; and col. 11, lines 25-40).

As per claim 2, *Ma et al.* further disclose the step of terminating comprising: identifying said at least one particular corresponding application component to be updated based on said notification (see, for example, col. 9, lines 6-43; and col. 10, lines 39-66); terminating instances of each said identified application component before said instances self-terminate (objects having a reference count of zero are deleted; a client object referencing an invalid object can read the invalid bit from the cache and decide to release the invalid object and load the update object; see, for example, col. 9, lines 6-43); and removing interdependencies between said terminated application component instances and other application components (for example, new references to objects marked invalid are no longer made; see, for example, col. 10, lines 39-66).

As per claim 3, *Ma et al.* further disclose the re-executing step comprising: instantiating each said updated application component (see, for example, col. 10, lines 39-66); and initializing each said updated application component instance (see, for example, col. 9, lines 6-43; and col. 10, lines 39-66).

As per claim 4, *Ma et al.* further disclose the initializing step comprising: communicating configuration information to said configuration client (see, for example, col. 9, lines 6-43); and reinitializing state information internal to each said updated application component based on said configuration information (see, for example, col. 9, lines 6-43; and col. 10, lines 39-66).

As per claim 5, *Ma et al.* further disclose requesting from said configuration client update notifications, said update notifications notifying said platform of application component updates

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as said updates become available in said configuration server (see, for example, col. 9, lines 6-43).

As per claim 6, *Ma et al.* further disclose the step of transmitting update notifications over said second communications connection to said configuration client, said update notifications notifying said configuration client of application component updates as said updates become available in said configuration server (see, for example, col. 9, lines 6-43).

As per claim 10, *Ma et al.* disclose a platform for managing active application components (client app 74; see, for example, Fig. 5; col. 8, lines 10-34; and col. 9, lines 6-43); a configuration server for storing updates (meta server 70; see, for example, Fig. 5; and col. 11, lines 1-24); and a configuration client for receiving updates from said configuration server and communicating said received updates to said platform (object adapter 80; see, for example, Fig. 5; col. 8, lines 10-34; and col. 9, lines 6-43); said platform receiving said updates from said configuration client, terminating selected ones of said active application components, applying said received updates to said terminated application components, and reloading said updated application components (see, for example, Figs. 5 and 8; col. 9, lines 6-43; and col. 11, lines 25-40).

As per claim 11, *Ma et al.* discloses that new instances of objects are created from the object description fetched from the meta-server's database (see, for example, col. 6, lines 4-6). Thus, at bootstrap (when new object instances need to be created), the configuration server is queried to determine the application components (object descriptions).

As per claim 12, *Ma et al.* further discloses active application components being processes executing in the background of the platform (see, for example, col. 4, lines 59-63).

As per claim 13, *Ma et al.* further disclose a notifier object and a listener interface, wherein said active application components are configured to receive update notifications from said configuration client through said listener interface (see, for example, col. 9, line 6, through col. 10, line 66).

As per claim 14, *Ma et al.* further disclose a notifier object and a listener interface, wherein said configuration client is configured to receive update notifications from said configuration server through said listener interface (see, for example, col. 9, line 6, through col. 10, line 66).

As per claims 15-20, these are machine readable storage versions of the claimed method steps discussed above (claims 1-6). *Ma et al.* further disclose the use of a machine readable storage for implementing the prescribed method steps (see, for example, cols. 21-22). All other limitations have been addressed as set forth above.

As per claims 24-31, see the disclosure applied above to claims 1-3, 5, 15-17, and 19.

As per claim 32, *Ma et al.* discloses establishing a communications connection between a client and a configuration server as the client undergoes bootstrap and querying the configuration server to identify a plurality of application components that are to be installed in the client (*Ma et al.* discloses that new instances of objects are created from the object description fetched from the meta-server's database (see, for example, col. 6, lines 4-6). Thus, at bootstrap (when new object instances need to be created), the configuration server is queried to determine the application components (object descriptions)); said client installing and executing said identified application components (see, for example, col. 9, lines 6-43); updating at least one application

component within the configuration server (client classes are updated; see, for example, Figs. 5 and 8; col. 9, lines 6-43; and col. 11, lines 25-40); conveying a notification that the application component is updated to said client (see, for example, col. 9, lines 6-43); said client determining whether the application component is executing and when said application component is not executing, receiving said updated application component from said configuration server and replacing the application component with said updated application component (objects having a reference count of zero are deleted; a client object referencing an invalid object can read the invalid bit from the cache and decide to release the invalid object and load the update object; see, for example, col. 9, lines 6-43).

As per claim 33, *Ma et al.* further discloses identifying at least one executing process that utilizes said application component (see, for example, col. 9, lines 6-43); terminating execution of said identified process before said process self-terminates (objects having a reference count of zero are deleted; a client object referencing an invalid object can read the invalid bit from the cache and decide to release the invalid object and load the update object; see, for example, col. 9, lines 6-43); and executing said identified process utilizing the updated application component instead of said application component (see, for example, col. 9, lines 6-43).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,920,725 to Ma et al. in view of Andrew S. Tanenbaum, "Computer Networks," 1996, Prentice Hall PTR, third ed. (hereinafter *Tanenbaum*).

As per claims 7 and 21, *Ma et al.* disclose such a method and machine readable storage (see the disclosure applied above to claims 6 and 20) but fail to expressly disclose the use of UDP packets for delivering the update notifications. However, *Tanenbaum* teaches that it is known to use UDP packets in client-server applications involving one-shot or one request/one response messaging as an alternative to establishing a connection through, for example, a TCP connection (see, for example, pages 37 and 542-543). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the method and storage of *Ma et al.* to include the use of UDP packets for transmitting update notifications. One would be motivated to do so to gain the advantages of prompt delivery and simplified messaging that UDP provides.

16. Claims 8, 9, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,920,725 to Ma et al. in view of Applicant's Admitted Prior Art.

As per claims 8, 9, 22, and 23, *Ma et al.* disclose such a method, system, and storage (see the disclosure applied above to claims 1, 10, and 15) but fail to expressly disclose the use of an

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LDAP-based database in an LDAP server. However, Applicant admits that it is known to use an LDAP on a server to access application updates and configuration information stored in a directory service (see p. 2, line 18, through p. 3, line 5 of the instant specification). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to modify the method, system, and storage of *Ma et al.* to include the use of an LDAP-based database in an LDAP server as suggested by Applicant's Admitted Prior Art. One would be motivated to do so to gain the advantages of such a known LDAP implementation.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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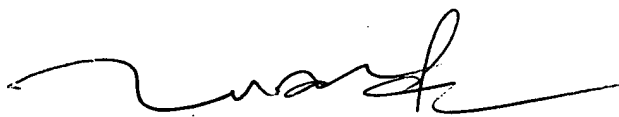
18. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature should be directed to the TC 2100 Group receptionist: 571-272-2100.

EBK/EGK
May 13, 2005


TUAN DAM
SUPERVISORY PATENT EXAMINER